



RE: Virginia permit numbers for Animal Feeding Operations

Mark Dubin

to:

Bowles, Betsy (DEQ)

08/23/2010 05:47 PM

Cc:

"Butt, Arthur (DEQ)", "Keeling, William (DCR)", Chris Brosch, Katherine Antos, "Russ Perkinson", "Pollock, Alan (DEQ)", Ann Carkhuff, Lucinda Power, Hank Zygmunt, Kelly Shenk

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From: Mark Dubin <mdubin@chesapeakebay.net> Sort List...

To: "Bowles, Betsy (DEQ)" <Betsy.Bowles@deq.virginia.gov>

Cc: "Butt, Arthur (DEQ)" <Arthur.Butt@deq.virginia.gov>, "Keeling, William (DCR)" <william.keeling@dcv.virginia.gov>, Chris Brosch <cbrosch@chesapeakebay.net>, Katherine Antos/CBP/USEPA/US@EPA, "Russ Perkinson" <russ.perkinson@dcv.virginia.gov>, "Pollock, Alan (DEQ)" <Alan.Pollock@deq.virginia.gov>, Ann Carkhuff/R3/USEPA/US@EPA, Lucinda Power/DC/USEPA/US@EPA, Hank Zygmunt/R3/USEPA/US@EPA, Kelly Shenk/CBP/USEPA/US@EPA

Good Afternoon Betsy,

Thank you for your time last week after the Virginia Nutrient Management training program in Sandston to discuss these data concerns further. In addition, thank you for your confirmation that the Wilmoth Brothers Farm swine operation is located in Buckingham County. I have notified the modeling team of this correction.

VPG100047	Wilmoth Brothers Farm	Buckingham County	Middle James River Subbasin	James River Basin	Active	Swine	Y	27
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Please find below the correction to the county listing. **Note: this still brings the Buckingham county total above the model animal count.**

Sampleyear	Countyname	State	AnimalType	Animacount	2010 CAFO animalcount	2010percent CAFO
2010	Buckingham	VA	hogs for slaughter	24,703	26,440	1.070315346

In reviewing the differences between the CBP Scenario Builder (SB) livestock data and the 2010 CAFO data, it came to our attention that livestock population data in SB is based upon information provided by Virginia and not from the USDA-NASS Agricultural Census for the majority of livestock categories. The population data for layers, broilers, pullets, dairy cattle, hogs, sows and turkeys were provided by Virginia. Equine populations were also obtained from state sources versus the Agricultural Census for all of the states since they are not included in the reports. The remaining livestock categories not obtained from Virginia sources were obtained from the Agricultural Census.

When differences occur between the two Virginia data sets, this may be due to several reasons. One reason may be an incorrect listing such as in the case with the Wilmoth Brothers swine operation. A second reason may be from differences in timing of updates. I am currently checking with the modeling team to determine the date of the Virginia data, but it may be found that it represents an older set of data than what you are using for the 2010 CAFO information. As soon as I receive a reply back from the team I will let you know.

Where there are differences between the 2010 CAFO data and the Agricultural Census projected from 2007 to 2010, there may be several reasons again why the two data sets do not appear to match. One reason is the redistribution of state-wide data to populate "Deleted" specific county data in the Agricultural Census. This issue arose in another state recently due to the existence of a single swine operation in a county that was not included in the Census information at the county level, but was redistributed by the model from state level data. A second issue can arise by projecting forward livestock populations from the 2007 Census data and then comparing them to actual CAFO permitted data, especially for new or recently expanded operations.

One potential method to work around these non-compatible data sets where the 2010 CAFO numbers exceed the county livestock population would be to consider distributing the CAFO numbers to an adjoining county located in the same watershed. This would allow for the team to develop the WLA and LA information at the watershed scale while we work with you to resolve the data discrepancies in preparation for the Phase II WIPs. If this option is amendable to you, the team would need direction from you on how to redistribute the operations still in issue.

Thank you again for the opportunity to work with you in resolving these issues. I am planning to be in attendance for the Virginia SAG meeting in Richmond tomorrow, so please feel free to speak with me there, or on Wednesday when I return to Annapolis. Thanks!

*Mark P. Dubin*

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**From:** Mark Dubin  
**Sent:** Wednesday, August 11, 2010 7:15 PM  
**To:** 'Bowles, Betsy (DEQ)'  
**Cc:** Butt, Arthur (DEQ); Keeling, William (DCR)

**Subject:** RE: Virginia permit numbers for Animal Feeding Operations

Good Evening Betsy,

Thank you for your memo following up on the conference call this morning. I wish to apologize for joining the call late due to my encounter with an unusually large traffic jam around the Baltimore region this morning. It took me close to three hours to reach the office!

I appreciate you sharing background information on this matter, for although I have been aware of previous discussions you and Bill have had with the modeling team, I have not been personally involved in the correspondence. I have started to acquaint myself with what has transpired so that I can appropriately address your questions quickly.

I believe that at least some of the concerns you have raised have been raised by other jurisdictions as well. In response to other inquiries I have received, I am currently in the process of developing a response document in conjunction with the modeling team that will be provided to all of the jurisdictions. It is my intention to have an EPA approved document available to the partnership by next week. I sense that this document may address a number of your concerns noted below.

Thank you again for your memo and voicemail message from this afternoon. I look forward to working with you to resolve any remaining questions and issues. Please feel free to contact me should you have additional questions or concerns. Thanks!

*Mark P. Dubin*

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**From:** Bowles, Betsy (DEQ) [<mailto:Betsy.Bowles@deq.virginia.gov>]  
**Sent:** Wednesday, August 11, 2010 5:07 PM  
**To:** Mark Dubin  
**Cc:** Butt, Arthur (DEQ); Keeling, William (DCR)  
**Subject:** Virginia permit numbers for Animal Feeding Operations

Hi Mark,

As you heard on the conference call this morning, we were a little surprised to hear last week on 8/4/10 during a conference call with Jeff Sweeney and Chris Brosch that the numbers which were provided in January 2009 were not used in the latest model. On 8/4/10, Bill Keeling and I completed an exercise to compare the Ag Census data in the model to our actual permitted operations which fall into the Large CAFO category. Bill added a column (F) for actual 2010 numbers and a column (G) for the calculated percentage of actual numbers to the Ag. Census numbers. One issue that I noticed when we compared the data is that we have differing animal types in the Virginia data compared to the model animal types. I asked what "other cattle" are vs. "beef heifers", one of the gentleman on the call indicated that there is a definition for the animal types used in the model, can you provide me with this information?

Another issue that we found is that there are 2 counties where the model numbers are lower than our actual animal numbers, one is Clarke County and the other is Albemarle County (see excerpt of table below). The animal numbers for the hog farm in Albemarle County must go into the JMSTF2 James Tidal Fresh 2 segment shed.

Sample year	County name	State	Animal Type	Animal count	2010 CAFO animal count	2010 percent CAFO
2010	Clarke	VA	dairy heifers	1,489	1,650	1.108126259
2010	Albemarle	VA	hogs for slaughter	0	2,760	#DIV/0!

Please find attached:

1. the email dated 1/12/09 including the excel spreadsheets with the animal numbers for the permitted operations in the BAY which were provided in January 2009: (Animal Feeding Operation in CHES Bay)
2. the spreadsheet that includes current animal numbers under coverage of a permit: (Virginia Statewide permit numbers for BAY TMDL.BKB.08.11.10.xls)
3. the email (dated 7/7/10) which includes the original excel spreadsheet containing the EPA Ag Census Animal Numbers.
4. the spreadsheet which compares the Ag census numbers (model #'s) and our actual animal numbers covered under what will be considered a large CAFO size operation, this spreadsheet also calculates the percentage (ANimalNumbers\_VA.xls)

As I understand it, the actual permitted numbers may be used when the model is updated at a later time. As of now, I will be sending the numbers contained in the (ANimalNumbers\_VA.xls) spreadsheet to Chris Brosch, et al.

Please feel free to contact me if you have any questions regarding this data.

Thanks so much for looking into this matter,  
Betsy

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Animal Feeding Operations for Livestock and Poultry web page: <http://www.deq.virginia.gov/vpa/cafo.html>

Agricultural web page: <http://www.deq.virginia.gov/vpa/agriculture.html>  
VPA web page: <http://www.deq.virginia.gov/vpa/homepage.html>